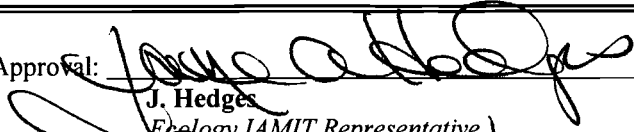



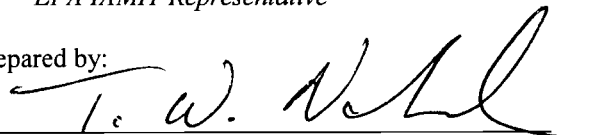
**River Corridor/Central Plateau  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
October 18, 2012**

**1217873**

Approval:  Date: 11/15/2012  
J. Hedges  
Ecology IAMIT Representative

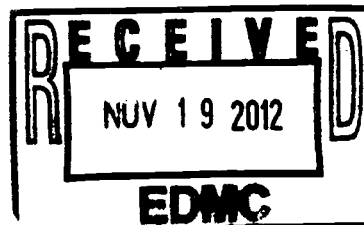
Approval:  Date: 11.15.12  
J.A. Dowell  
DOE IAMIT Representative

Approval:  Date: Nov 15, 2012  
D.A. Faulk  
EPA IAMIT Representative

Minutes Prepared by:  Date: 11/15/2012  
T.W. Noland  
Mission Support Alliance, LLC

Blackburn, J. E.\* WCH  
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Brown, M.J. Ecology  
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Butler, D.H. MSA  
Cameron, C.E. EPA  
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Cline, M.W.\* RL  
Collins, M.S.\* RL  
Cox, W.G. CHPRC  
Dittmer, L.M.\* CHPRC  
Dover G.L.\* WCH  
Dowell, J.A.\* RL  
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Ellison, B.A. RL  
Farabee, O.A.\* RL  
Faulk, D.A. EPA  
Foley, B. L.\* RL  
French, M.S.\* RL  
Gadbois, L.E. EPA  
Goswami, D. Ecology  
Harris, S. CTUIR  
Hedges, J.\* Ecology  
Henry, D. ODE  
Jentzen, B.K.\* Ecology  
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Killoy, S.E. WRPS  
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Louie, C.S. RL  
Lynch, J.J. ORP  
McKarns, A.C. RL  
Menard, N.M. Ecology  
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Teimouri, A.E. HQ  
Teynor, T.K.\* RL  
Vanni, J. Yakama  
Welsch K.R.\* Ecology  
Whalen, C.\* Ecology  
Yasek, D.M.\* WCH  
Administrative Record



\*Attendees

**River Corridor/Central Plateau  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
October 18, 2012**

**River Corridor Closure Project - Milestones M-16/M-89/M-92/M-93/M-94**

Quarterly Summary (July - September 2012) - DOE-RL noted that a major activity has been the renegotiation of TPA milestones under M-16 and M-89. The final legal reviews to the milestone change packages are under way.

Milestone Status:

M-16-145 - DOE-RL reported that the sampling in 118-K-1 is nearing completion, and backfilling is being initiated. The tritium plume underneath the 118-K-1 burial ground will be addressed in the final Record of Decision (ROD).

M-16-55 - DOE-RL noted that about 60 waste sites in the 100-N area have been completed, and 60-plus waste sites out of about 120 waste sites are in the closure process.

M-16-139 - Ecology inquired about removal of the 300-VTS from the milestone scope due to the land being transferred to the Navy. DOE-RL explained that the Navy moved the area where the transporter for the reactor compartments are tested, and DOE-RL is leasing the land to the Navy.

Significant Accomplishments - For Last 3 Months:

M-16 - Remedial Action/Risk Assessment - DOE-RL reported that the PNNL groundwater sampling activities at C-7:1 has been completed, and during the two months of monitoring the levels continued to drop. DOE-RL will forward the results to EPA. WCH awarded contracts for remediation of the D/H, B/C and 100N areas, and remediation has started in each of those areas. Backfilling of the remaining two waste sites in 100-F is under way, and the interim actions at 100-F were considered complete in September 2012. DOE-RL noted that the one drum in 618-10 burial ground that had a slight pyrophoric reaction was processed without incident, and the lessons learned are being applied to the ongoing remediation in 618-10. The transition of 100-F Area from WCH to MSA surveillance and maintenance is under way. DOE-RL stated that the plan is to go from 73 percent footprint reduction to 78 percent for reduction of the total site.

M-89 - 324 Building - DOE-RL noted that infrastructure evaluations are being done to determine what upgrades are needed for minimum safe operations until the remediation is completed. Replacement of the old heating coils is in progress.

M-94 -300 Area Surplus Facilities Disposition - DOE-RL stated that the above-grade demolition of 310 TEDF was completed, although the tanks associated with the water

processing plant are being left in place to support the process sewer system. The tanks may be removed in the future if PNNL implements zero onsite discharge and discharges directly to the city sewer system.

ERDF - DOE-RL noted that the 253,000 tons of waste disposed of at ERDF for the last quarter is down quite a bit from the quarters in the last two years. The lower amount is due to WCH and CHPRC winding down some of their contracts, resulting in less waste to dispose. CHPRC will be ramping back up as the 100 Area remediation is started, and the forecast is for about 1.6 million tons to be disposed in 2013.

#### Significant Actions Planned - For Next Six Months:

ERDF - DOE-RL stated that the macroencapsulation treatment outside of the cells has started, and DOE-RL is continuing to work towards obtaining approval to resume in-trench treatments. EPA noted that the chrome and lead soil treatment is not technically in-trench but will continue to be done next to the trench.

Performance Summary - DOE-RL reported that WCH continues to maintain a positive cost and schedule variance.

Issues - EPA inquired about the third issue regarding new RODs, specifically the recommendation to address potential changes in cleanup standards. DOE-RL responded that it is the process to address any changes in the cleanup remedial action goals in the final ROD. Ecology added that there could also be a timing issue for transitioning from the interim action remedial action work plan (RAWP) to a revised RAWP under the final ROD. DOE-RL noted that there are contaminants of concern (COCs) that are being targeted for reevaluation in the preliminary remediation goals (PRGs).

DOE-RL noted an upcoming issue not listed in today's handout regarding the remediation of clean water pipelines. Some spot contamination has been found in the pipelines (rad and chrome), and there are differing opinions about whether to remediate the pipes versus leaving them in place. DOE-RL is preparing a package of recommendations to send to EPA and Ecology for review and comment.

#### **Hanford 100-K Remediation - M-016 and M-093 TPA Milestones**

##### Accomplishments - 4th Quarter 2012:

Completed Milestones - DOE-RL noted that milestone M-016-172, to remove all the knockout pot (KOP) material from the KW Basin by 9/30/2012, was completed. DOE-RL reported on an issue with the final KOP multi-canister overpack (MCO) that resulted in an occurrence report. The QA/QC inspector signed off that the MCO vent port plug was installed without verifying that it was completed, and two craft workers signed off that it was completed. The vent port protective cover was placed over the vent port assembly without placing the plug. DOE-RL stated that the purpose of the MCO vent port provides a secondary barrier to the KOP material in the MCO, and there was no

breach to the primary barrier. When the MCO was received at the CSB, the workers heard a hiss as they started to un-torque the vent cap. The cap was secured and the workers left the room. EPA asked if the plug needs to be installed at CSB. DOE-RL explained that placing the plug is just for transport only and does not need to be installed.

STP Phase 1 Removal of Containerized Sludge (M-016-174) - DOE-RL reported that this milestone, due September 30, 2013, is on schedule to complete the final design report of the sludge retrieval and transfer system. The contractor completed their internal final design review on September 27, 2012. Comment resolution is underway. There are about 200 type B comments, which need to be completed after the design startup. About 250 type A comments have been completed which have to be resolved prior to start of construction.

Sludge Removal from 105-KW Fuel Storage Basin (M-016-175) - DOE-RL reported that sludge transfer annex modification started. The contractor discovered inaccuracies in the annex rebar and concrete design. No Annex concrete pours are proceeding until the calculations have been corrected, reviewed and validated. It is anticipated that concrete pours will commence in early November 2012.

KE Reactor Interim Safe Storage (ISS) - DOE-RL noted that due to funding constraints, the KE Reactor ISS milestone (M-093-22) is in renegotiation to be concurrent with the KW Reactor ISS milestone. DOE-RL is in discussions with EPA to reach consensus on the extent of cleanout that is necessary. The contractor has completed the technical evaluation for construction of the safe storage enclosure (SSE) and made a vendor selection. DOE-RL is reviewing the contractor's recommendation.

100K Waste Site Remediation - DOE-RL reported that the main work left to meet M-016-53 for Phase 1 is revegetation, and it is on schedule to meet the 12/31/2012 milestone due date. DOE-RL noted that EPA has requested two boreholes, with one located near the 105KE Reactor Fuel Storage Basin discharge chute and one by 116-KE-3. DOE-RL is working to make available funding for two boreholes. DOE-RL stated that a decision will be made by next week to carry the work at risk and move forward.

100 K D4 Activities - DOE-RL noted that work continues with 105-KE ISS activities to ensure the reactor is sealed and in a safe condition until a decision is made about going forward with ISS, or if the samples taken near the KE reactor will dictate a different action. DOE-RL expressed appreciation to EPA for its assistance with the 183.2KE sedimentation basin. Sampling of the basin concrete and underneath the basin resulted in the determination that the majority of the floor could be left in place, which saved a significant amount of time and money. DOE-RL noted that the 105-KE pipe tunnel that carried cooling water from the pumphouse to the reactor is temporarily being left in place. It will be taken out in the future.

Milestone Status - DOE-RL noted that several milestones are now being reported as at risk since the budget profile has gained more clarity and higher priority work is identified. DOE-RL stated that once internal decisions are made regarding carryover

funding for FY13, discussions with EPA and Ecology will be initiated in an effort to work directly with the agencies regarding FY13 work scope priorities and compliance with future milestones.

Project Baseline Performance - DOE-RL stated that the project performance for ARRA finished on schedule and slightly over budget. There was sufficient contingency funding to pay for the small overrun, and all work was completed. The cost and schedule variances for RL-12 were due to the 2011 bump and roll associated with ARRA work. Workers were moved to other sites on the Central Plateau, and the found fuel from the WCH burial grounds and during prewashing of the KOP material was not able to be moved. The lost schedule has since been regained and all of the material has been moved. The 100K Area is now fuel free.

#### Planned Activities Next Six Months:

105KE Reactor ISS - DOE-RL stated that the cleanouts and pourbacks will continue, and the remaining ISS work is on hold awaiting a decision on funding for the boreholes and the results from the borehole sampling.

Sludge Treatment Project - DOE-RL stated that the process is under way to transition the Cold Vacuum Drying Facility from a Hazard Category 2 facility to a radiological facility, which will be a cost savings of about 5 million dollars per year. The process has to be done in a controlled, detailed manner, going through the nuclear safety documentation for a final calibration of instruments.

#### **M-91/M-26 TPA Quarterly Milestone Review**

M-91 - DOE-RL reported that there was no change in status since the last quarterly report, and operations remain in minimum safe operations. The Earned Value Management System (EVMS) data has not been updated since the last quarter. DOE-RL noted that the Project Management Plan (PMP) was submitted to Ecology in June 2012, meeting the M-091-03 milestone, and Ecology has provided comments on the PMP.

Ecology initiated a discussion regarding the transuranic (TRU) waste corporate board meeting. DOE-RL provided an overview of the meeting, and will forward a summary to Ecology and EPA. DOE-RL stated that during the meeting, the board agreed that the aperture for the Waste Isolation Pilot Plant (WIPP) could be increased to accept other materials, which DOE-RL has an interest in with its defense-related waste. DOE-RL noted that the aperture increase at WIPP would require a change in law for the state of New Mexico and possibly by Congress, and the earliest that could happen would be three to five years. DOE-RL stated that it will be closely watching the three sites that will be sending TRU waste to WIPP through 2015 since the Hanford site will start looking at regenerating its TRU program in late 2014 and early 2015 to ensure the TRU program is on track to send TRU waste to WIPP in 2016. DOE-RL added that there is the possibility that shipment of the Hanford TRU waste could be delayed if one of the other three sites (Savannah River, Idaho and Los Alamos) TRU shipments take precedence in 2016.

## **PFP Closure Project - TPA Milestone M-083**

Quarterly Milestone Summary (July - September 2012) - DOE-RL reported that after a review of the most recent performance management baseline (PMB) from the contractor, the decision was made to report Milestone M-083-44 as in jeopardy. The milestone is due September 30, 2015. DOE-RL stated that part of the reason for reporting the milestone in jeopardy is due to FY 2013 projected funding, which is about 19 million dollars less than what is needed in the current baseline planning. Another contributor is the delays in schedule resulting in a negative schedule variance. DOE-RL noted that the delays are not related to work practices, but are due to aging equipment failures and the beryllium program stop works to ensure worker safety. DOE-RL stated that it is anticipated the gaps in schedule will start closing in FY13, and DOE-RL would then know whether M-083-44 will be completed as scheduled. DOE-RL added that one of the challenges is dealing with unanticipated problems. A recent example cited was when workers were draining nitric acid lines that were expected to be empty, they found places in the lines that were not empty. DOE-RL stated that the focus is to regain schedule and to meet the M-083-44 milestone.

Accomplishments - 4th Quarter - DOE-RL stated that the Plutonium Reclamation Facility (PRF) canyon crane was repaired, and a positive note was that FY13 maintenance that was planned for the crane was completed during the repair. DOE-RL reported that the two sections of glovebox HA-23S have been separated and removed from its initial location, and the lower section is targeted to be moved out of room 235B by October 22, 2012. DOE-RL noted that HA-23S was one of the most complex and high risk gloveboxes worked on to date, and the PFP teams were able to safely execute the work.

Project Baseline Performance - DOE-RL reported that ARRA funds were completely expended by September 23, 2012, with a cost performance index (CPI) of 0.96 and a schedule performance index (SPI) of 1.0. The total project CPI was 0.97 and SPI was 0.98. The base program, which is what PFP is working with dollar-wise going forward, had a CPI of 0.98 and an SPI of 0.96.

Issues/Challenges - DOE-RL stated that efforts are under way to be prepared for demolition ready and to determine ways to streamline activities. DOE-RL reported that efficiencies were achieved with the removal of TRU whole and using the standard large box (SLB2). A decision will need to be made regarding open air demo or using a containment structure. The contractor has initiated an independent review of the demolition strategy. RL is planning to meet with the contractor to discuss their current perspective regarding the demolition strategy.

Planned Activities Next 3 Months - DOE-RL stated that the contaminated equipment special packaging authorization (CE-SPA) will be implemented for TRU debris, duct work and piping in SLB2s. DOE-RL noted that the removal of gloveboxes HC-12S and HC-13MD has been completed. In the 236-Z PRF facility, size-reduction of pencil tank 37 has been completed.

**Central Plateau Remediation Project - M-016-00, M-085-00**

Accomplishments - 4th Quarter 2012 - DOE-RL reported that the 700 feet of asbestos pipe was cut into 20-foot segments and disposed of at Arlington landfill in Oregon. DOE-RL is developing a flow chart to determine the highest priority areas of concern on asbestos piping, and to adjust the inspection frequency for the highest areas of concern and inspect them accordingly with the funding available. In response to Ecology's question regarding the categorization of asbestos sites on the Waste Identification Data System (WIDS), DOE-RL stated that there are 25 new WIDS sites that are awaiting review and approval relative to asbestos. Once those sites are approved, DOE-RL will provide the example of the effort to ensure that corporate knowledge is not lost on the asbestos sites.

DOE-RL provided a status on the EPA issue regarding asbestos material removed from pipe to allow cutting the pipe into 20-foot segments. This material was stored in plastic bags awaiting disposal. During an EPA site inspection, the inspector noted that there wasn't enough water in the plastic bags and this issue will continue to be discussed.

DOE-RL noted that transite was discovered throughout the site on specific areas of remediation, and it is not known where the transite came from. DOE-RL stated the asbestos program is on hold from a standpoint of alternative asbestos control methods (AACM). DOE-RL noted that the AACM no longer exists. Currently there is a working group in DOE that is working with EPA to determine the path forward in the area of worker safety concerns if the friable asbestos cannot be removed and how it can be taken down and managed. DOE-RL noted that it has been working with WCH since 2006, and more recently with CHPRC, on asbestos mitigation and worker safety concerns. DOE-RL indicated that there is no significant asbestos mitigation work planned for the next two years, with the possible exception of some work in the 300 Area. The expectation for removal of containers and reactors is that most of the material will not require any AACM and that it will be mitigated normally. The goal is for the DOE and EPA working group to agree on a process to use in the future for asbestos mitigation.

DOE-RL referred to the miles of piping, and the priority for tearing out the piping in lieu of maintenance is being considered from a funding standpoint. DOE-RL indicated that funding for tearing out the piping won't be provided at the cost of missing some major milestones, and the odds are there won't be a lot of asbestos work in the near term.

Milestone Status - Ecology asked how much money is needed to complete the U Plant demolition and to place the barrier (M-016-200A/200B). DOE-RL responded that there is adequate funding in the requested profile to complete the work, and will provide Ecology the dollar costs by year.

**Soil and Groundwater Remediation Project Milestone Review - M-015-00, M-016-00, M-024-00, M-037-00, M-085-00**

#### Accomplishments - 4th Quarter:

DOE-RL reported that the 200 West pump and treat facility won an achievement award from the DOE Secretary of Energy. There were 11 achievement awards from the Secretary in 2012.

200 West Area Groundwater Treatment Facility - DOE-RL provided early internal data on the treatment 200 West pump and treat system, and noted that biodigester and the resin in the rad building are working well. The state cleanup standard for carbon tetrachloride, if it is the only contaminant, is five parts per billion. Since there are multiple contaminants, the cleanup standard for carbon tet is 3.4 ppb, and DOE-RL reported that at inlet carbon tet is coming in at 930 ppb and it's coming back at less than one, which is nondetectable. Nitrates at inlet are coming in at 32.7 milligrams per liter, and effluent is .032, less than detectable. Chrome is coming in at 80 milligrams per liter and effluent is 1.4 mpl. Technetium 99 is 2,200 picocuries per liter at inlet to the rad building, and effluent is less than 17, which is detection limit.

DOE-RL stated that the standard cleanup objective for uranium is 30, and it's coming in at 2 and leaving at a quarter. DOE-RL noted that the resin being used doesn't specifically target uranium, but the resin is working. When there are nontargeted species, the resin will remove some of the contaminants, but normally the cleanup objective is not received. DOE-RL stated that when the resin becomes more loaded, the dynamics of how it is working may change. Ecology requested the data on the removal of contaminants, and DOE-RL will provide a copy.

200-DV-1 - DOE-RL reported that the perched water removal system has been authorized to restart, and the restart is expected any day. DOE-RL is continually looking at efficiencies in an effort to realize cost savings. DOE-RL noted that the groundwater from 200 East has a high concentration of uranium, and it is reviewing the potential to set up a small pretreatment skid to strip out the uranium instead of sending it to the Effluent Treatment Facility (ETF). DOE-RL also noted the pipeline that was built for the aquifer testing will generate a large amount of water, and it will be expensive to send it to ETF for treatment. DOE-RL indicated that the goal is to get ETF idle by 2014, when ORP is planning to do modifications to ETF to accept low activity waste from the Waste Treatment Plant (WTP). DOE-RL added that the permit for ETF will remain viable and the facility will most likely be in an intermittent operational mode.

Sampling - DOE-RL stated that the RFP for the contractor called out for 13,000 analytical samples, and the contractor reported that over 20,000 samples were done last year. DOE-RL noted that the costs for well monitoring are increasing, and suggested alternate technologies for sampling to reduce costs, such as using field kits for every other sample. Another possibility is using a technology developed by a local company that submerges an integrated circuit into a well, providing realtime hexavalent chrome readings. The readings can be verified for accuracy or the precision of the information. DOE-RL noted that agreement on the approach to sampling needs to be a consensus with EPA and Ecology. Ecology stated that it is open to changes with sampling, and requested

that any proposal include the pros and cons. Ecology noted that there needs to be a connection, and in some cases consolidation, between RCRA and CERCLA regulations.

Milestone Summary - DOE-RL noted the four target milestones that were missed, but indicated that the path forward is optimistic. Ecology stated that milestone M-015-00D should be listed as to be missed or at risk, even though it's being renegotiated to exclude 100-BC and 100-N.

Project Baseline Performance - DOE-RL stated that total funding is of concern, but none of the variances pose a concern.

Planned Activities Next 6 Months:

200-ZP-1/200-PW-1 Soil Vapor Extraction (SVE) - DOE-RL reported that there was a spill of sanitary water at 200 West. A water line broke inside the building and filled up the sumps, and the control system shut down the plant. The flooding did not reach the electrical equipment. The water line has been repaired and a weakness in one of the piping configurations was identified. Some of the fittings are being replaced with metal fittings instead of plastic fittings, which was the cause of the failure.

200-BP-5 - DOE-RL reported that decommissioning of well 299-E33-18 has been authorized.



**Thursday, October 18, 2012**  
Ecology Offices, Conference Room 3A/B  
3100 Port of Benton Blvd  
Richland, Washington

### **Agenda**

**River Corridor/Central Plateau Milestone Review Meeting**  
**Chairperson: Dave Einan**

<b>Time</b>	<b>Milestones</b>	<b>Subject</b>	<b>DOE Presenter</b>
8:30 a.m.	M-16, 89, 93 and 94	River Corridor Closure	Mark French
8:55 a.m.	M-16 and 93	100 K Remediation	Tom Teynor
9:15 a.m.	M-26	Land Disposal Restrictions Report	Mike Collins
9:20 a.m.	M-91	Acquisition of Facilities to TSD TRU/TRUM and LLMW	Mike Collins
9:30 a.m.	M-16 and 85	Central Plateau Remediation	Al Farabee
9:40 a.m.	M-83	PFP Transition	Bryan Foley
10:00 a.m.	M-15, 16, 24, 37 and 85	Soil and Groundwater Remediation	Briant Charboneau
10:25 a.m.	Adjourn Milestone Review		

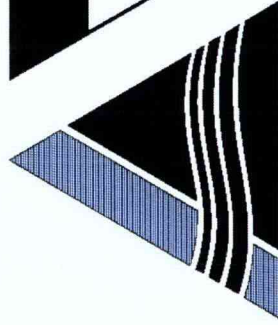
*Tri-Party Agreement River Corridor/Central Plateau Milestone Review*  
*October 18, 2012*

<u>Name</u>	<u>Organization</u>
Terry Noland	MSA
Kathy Knox	Knox Court Reporting
ROB PIERCE	MSA
Rick Bond	Ecology
Mark French	DOE-RL
Ron Skinnaback	Ecology
KIM WELSH	ECOLOGY
Donna Upsek	WCH
John Price	Ecology
Stanley Simon	ODOE
Cheryl White	Ecology
JD DOWELL	DOE-RL
Dave Einar	EPA
Jane Hedges	Ecology
Tom Teynor	DOE-RL
Job Blackburn	WCH
Gordon Dove-	WCH
Reed Kaldor	MSA
Lorna M Dittmer	CHPRC
Pod Wbos	EPA

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# TPA Quarterly Review

For Period: July - September 2012



*Tri-Party Agreement*

## River Corridor Milestones:

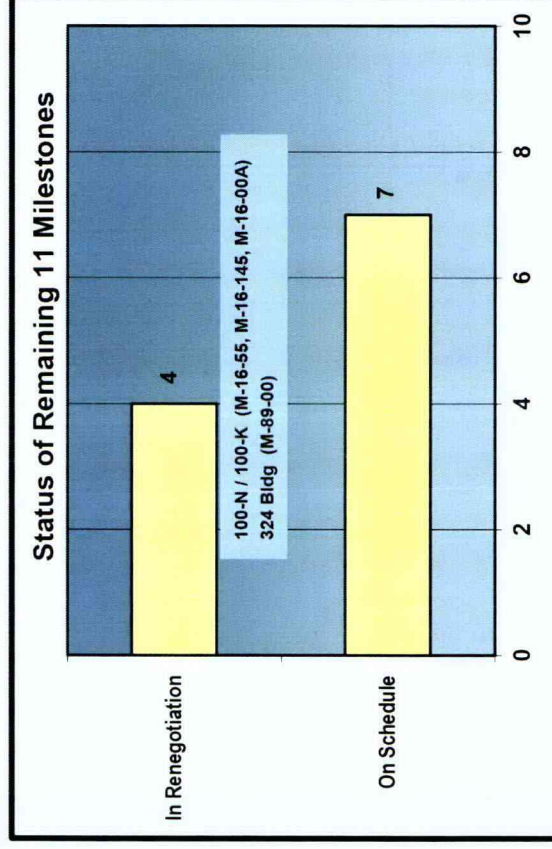
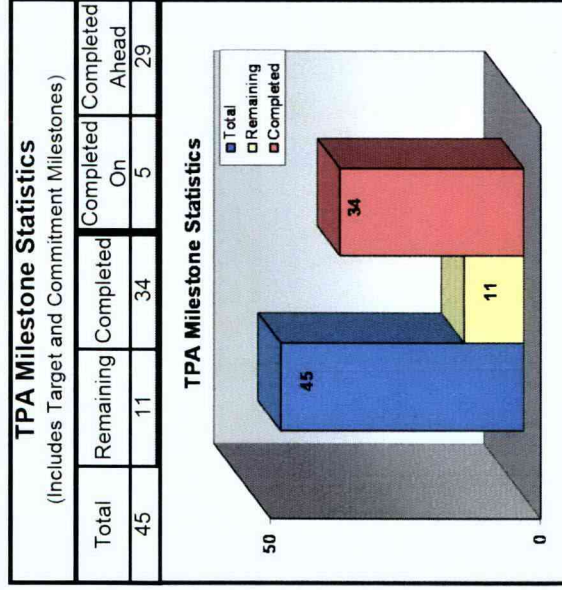
M-16    M-89    M-92    M-93    M-94

U.S. Department of Energy  
U.S. Environmental Protection Agency  
Washington State Department of Ecology

**October 18, 2012**

# RIVER CORRIDOR CLOSURE PROJECT

For Period: July – September 2012



## Quarterly Summary (July - September 2012)

- **Completed TPA Milestones:**

- M-93-20 – Complete N-Reactor ISS (due 9/30/12) – 9/19/12
- M-16-74 – Complete Remediation of 300 Area "Inside the Fence" Waste Sites North of Apple Street (due 9/30/12) – 9/26/12

- **Proposed Change Requests:**

- M-16-12-06 is being proposed to add new milestones to track continued progress of 100 Area interim remedial actions. The change will also propose new completion dates for site/facility closures that are forecasted to extend beyond the December 31, 2012 milestones (M-16-00A, M-16-55, and M-16-145).
- M-89-12-02 is being proposed to add a new interim milestone and revised completion date for M-89-00.
- Public comment for the above milestones renegotiation tentative agreements is planned to begin on October 22, 2012.

# RIVER CORRIDOR CLOSURE PROJECT

For Period: July – September 2012

TPA MS No.	Compliance Date	Title	Status	Comments
<b>M-16 Milestones - Remedial Action (milestones through 12/31/2013)</b>				
M-16-74	09/30/12	Complete Interim Remediation (to include excavation, loadout, closeout sampling, backfill) for all 300 Area "Inside the Fence" Waste Sites North of Apple Street. Except that the 300-268 and 300-123 Waste Sites Remediation Need Only Be Completed Through Excavation and Loadout	Complete	Milestone was completed 9/26/12. RL and EPA approved change notice to the RDR that describes how waste sites affected by retained utilities and facilities will be addressed under TPA milestones.
M-16-55	12/31/12	Complete Interim RA for 100-N Area	In renegotiation	Proposed milestone changes are being developed as part of the milestone renegotiations.
M-16-145	12/31/12	Complete Interim RA for 100-K Area Facilities and Waste Sites not Included as Phase 1, 2, or 3 Work	In renegotiation	Unanticipated soil contamination encountered at 118-K-1. Proposed milestone changes are being developed as part of the milestone renegotiations.
M-16-00A	12/31/12	Complete All Interim RA for 100 Area Units, with Exception of 100-K Area, by Specified Due Date as Approved in a RDR/RAWP	In renegotiation	To be missed due to M-16-55, M-16-145, and as a result of encountering unanticipated soil contamination at 100-C-7 and 100-D-30. Proposed milestone changes are being developed as part of the milestone renegotiations.
M-16-139	03/31/13	Complete Revegetation of 300-FF-2 Waste Sites Governed by M-16-62, M-16-64, M-16-74	On schedule	Need to remove 300-VTS from milestone scope. Land was transferred to the Navy.
M-16-75	09/30/13	Initiate Substantial and Continuous Remediation on 309 Facility Dedicated Radioactive Liquid Waste Sewer ( 300 RLWS) and 300 Area Process Sewer (300-15) Systems	On schedule	

# RIVER CORRIDOR CLOSURE PROJECT

For Period: July – September 2012

TPA MS No.	Compliance Date	Title	Status	Comments
<b>M-89 Milestone - 324 Bldg Non-Permitted MW Units Closure</b>				
M-89-00	09/30/12	Complete Closure of Non-Permitted Mixed Waste Units in 324 Bldg REC B-Cell, REC D-Cell, and High Level Vault	In renegotiation	Soil contamination encountered under 324 B-Cell. This is a differing condition and has resulted in cost and schedule impacts. Draft change package was submitted to regulators on 6/14/12; RL initiated dispute on 7/5/12; dispute has been extended to 10/27/12. Milestone is being addressed in milestone renegotiations.

## M-92 Milestone - 300 Area Special Case Waste

M-92-16	09/30/15	Complete Removal and Transfer, and Initiate Storage of Phase III 300 Area Special Case Waste and Materials	On schedule	
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## M-93 Milestone - Reactors Final Disposition

M-93-20	09/30/12	Complete 105N Reactor ISS	Complete	Milestone was completed on 9/19/12.
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## M-94 Milestones - 300 Area Surplus Facilities Disposition

M-94-09	09/30/13	Complete Removal and/or RA for 13 of Following Facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, 326, 327, 329, 333, 340, 340B, 3706, and 3720; to include 323 Facility	On schedule	
M-94-00	09/30/15	Complete Disposition of 300 Area Surplus Facilities Identified in the RAWPs for the 300 Area Facilities	On schedule	Soil contamination encountered under 324 B-Cell will cause schedule impacts in completing the 324 demolition. However, the other 300 Area surplus facilities are all on schedule. A TPA milestone change request will be prepared after the 324 disposition schedule has been established.

## ***Significant Accomplishments – For Last 3 Months:***

### **M-16 – Remedial Action / Risk Assessment**

- Continued supporting PNNL groundwater sampling activities at 100-C-7:1.
- Completed power line relocation design at 100-D/H Areas.
- Received technical proposals and bids for 100-D/H remaining sites procurement.
- Commenced backfilling activities at several 100-D Area waste sites.
- Received backfill concurrence for two remaining wastes sites in 100-F Area.
- Shipped all 118-K-1 anomaly items to ERDF or off-site; evaluating closure options.
- Awarded subcontract for remediation of remaining 100-N Area waste sites.
- Through September, excavated 465 drums; processed 345 from 618-10 Burial Ground.
- Received approval of 25 waste site closure documents during this reporting period.
- Completed Tri-Party review of Draft A human health risk assessment report; initiated preparation of Rev. 0 document for Tri-Party approval.
- Continued preparation of 100-F Area transition and turnover package.

### **M-89 – 324 Bldg Non-Permitted MW Units Closure**

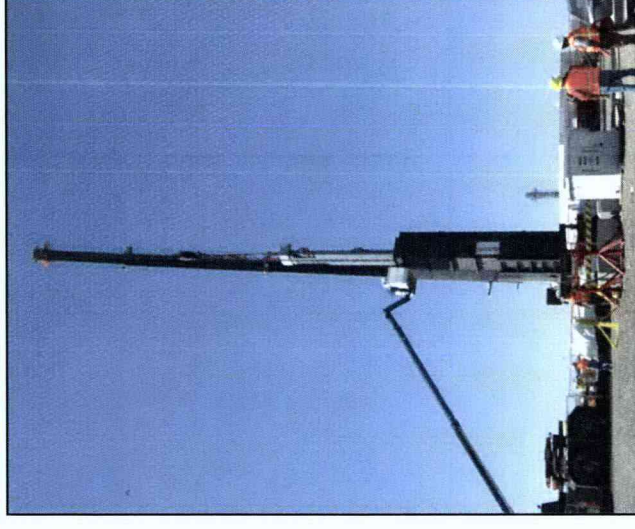
- Continued infrastructure evaluations to maintain minimum safe operations of the 324 Complex.

### **M-93 – Reactors Final Disposition**

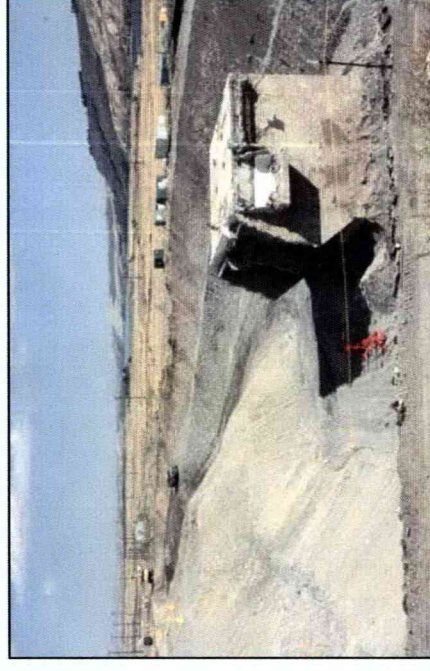
- Completed N-Reactor interim safe storage, satisfying completion of TPA M-93-20.

### **M-94 – 300 Area Surplus Facilities Disposition**

- Completed removal of 309 Fuel Examination Cell (FEC) and transported to ERDF.
- Completed above-grade demolition of 310 (TEDF).
- Completed excavation of the 340 vault ramp.



Placing FEC into IP-1 Canister



Preparing 340 Vault for ERDF Shipment – Ramp Completion

## Significant Accomplishments – For Last 3 Months (cont'd):

### ERDF

- For period July-September, disposed ~ 253,000 tons of waste; bringing total to ~ 14.2 million tons disposed in ERDF.
- Coordinating ERDF performance assessment with Tank Closure and Waste Management Environmental Impact Statement. Estimating DOE Low-Level Waste Disposal Facility Federal Review Group (LFRG) review beginning in January 2013.



Disposal of 309 Fuel Examination Cell at ERDF

## Significant Actions Planned – For Next 3 Months:

### M-16 – Remedial Action / Risk Assessment

- Continue backfill operations at 100-D Area waste sites.
- Complete backfill operations at 100-F Area.
- Complete 100-N Phase II in-situ bioremediation construction; initiate testing.
- Issue subcontract to remove 618-10 cone penetrometers.
- Issue Human Health Risk Assessment Report, Vol. II, Rev. 0 for Hanford Site releases to the Columbia River.
- Complete 100-F Area transition and turnover package.

### M-89 – 324 Bldg Non-Permitted Mixed Waste Units Closure

- Maintain min-safe conditions until path forward is determined for remediation of 300-296 waste site under B-Cell.

### M-94 – 300 Area Surplus Facilities Disposition

- Complete removal of 308A TRIGA Reactor, 340 Vault, 309 PRTR, and ship all to ERDF for disposal.
- Complete below-grade demolition/loadout of 310 (TEDF).
- Complete above-grade demolition/loadout of 329 Chemical Sciences Laboratory.

### ERDF

- Begin interim cover installation for Cells 5/6.
- Begin macroencapsulation treatment outside of cells.

**PERFORMANCE SUMMARY**

Contract Inception (8/27/05) through September 2012  
(\$K)

	IPB					CUMULATIVE			Previous Quarter Comparison			
	BAC		EAC		BCWS	BCWP	ACWP	SCHEDULE VAR (\$)		COST VAR (\$)		
								Jun	Sep	Jun	Sep	
D4	570,335		531,173		495,245	512,693	429,288	34,598	17,448	85,899	83,405	
Reactor ISS	75,883		81,195		75,024	74,168	79,970	-665	-856	-3,311	-5,802	
Field Remediation	726,964		841,932		592,450	581,264	549,523	-20,430	-11,186	31,757	31,741	
Waste Operations	558,920		451,420		409,969	478,584	370,432	107,135	68,615	112,778	108,152	
ESFC	74,279		62,699		65,703	64,541	53,771	-1,016	-1,162	8,676	10,770	
Mission/General Support	330,093		364,693		309,540	309,540	272,736	0	0	33,010	36,804	
Transition	3,979		3,747		3,979	3,979	3,747	0	0	232	232	
Contingency	47,059		47,059									
TARGET COST TOTAL	2,387,511		2,383,918		1,951,909	2,024,769	1,759,465	119,623	72,860	269,040	265,304	

**Schedule Variance (PMB): \$72,860K**

- Acceleration of 300 Area and 100-N Area building demolitions.
- Remediation delays at 100-D, 100-N, and remaining waste sites around 309 building.
- ERDF transportation, treatment, and disposal support to accelerated work in FR and D4 Projects.

**Cost Variance (PMB): \$265,304K**

- Significant underruns experienced in 300 Area building characterization, deactivation, and demolition activities.
- 100-B/C, 100-D, 100-F, and 100-IU-2/6 remediation underruns. Partially offset by project support costs at all active dig sites.
- Costs have been less than planned due to Waste Operations efficiencies achieved in waste treatment, transportation, and construction.

## **RCC Issues**

### **100 Area**

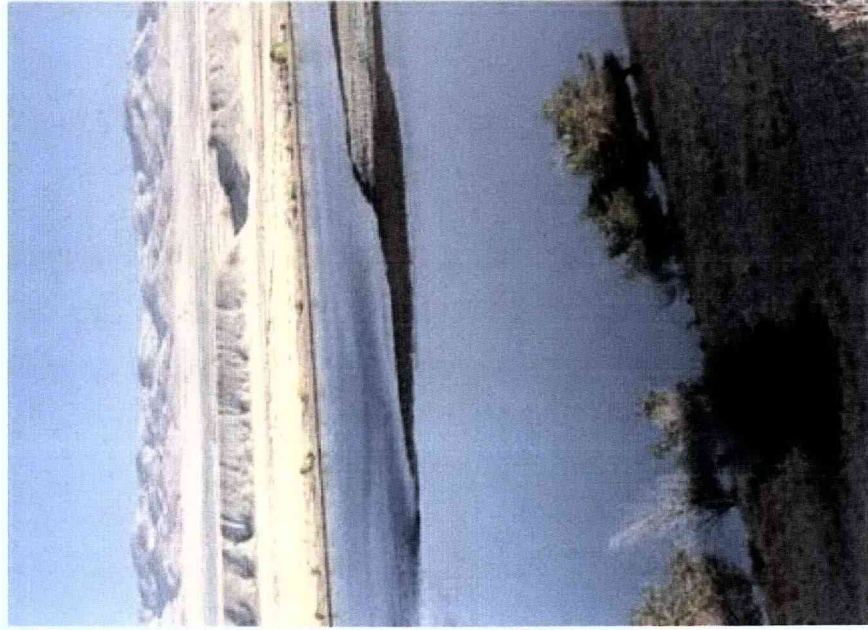
- **Issue:** TPA Milestones M-16-00A, M-16-55, and M-16-145 will not be completed in time to meet December 31, 2012 due dates. Unexpected soil contamination is the primary reason for the requested milestone changes.
- **Status:** RL, EPA, and Ecology have completed milestone renegotiations and have reached tentative agreement on proposed changes to the milestones. The tentative agreement and proposed changes are scheduled to be issued for public review on October 22, 2012.

### **300 Area**

- **Issue:** The radiological contamination encountered under the 324 facility has impeded completion of the M-89-00 milestone that was due on September 30, 2012.
- **Status:** RL and Ecology entered into dispute on July 5, 2012 to develop a path forward, and was resolved as part of the milestone renegotiations. The tentative agreement and proposed changes to the milestone are scheduled to be issued for public review on October 22, 2012.

### **New RODs**

- **Issue:** Transitioning remediation from interim action records of decision to the new records of decision may result in differences in remedial action goals.
- **Status:** RL is developing a recommendation to address potential changes in cleanup standards, which will be presented to the regulatory agencies for discussion.



# 100K Soil Remediation, D4, ISS, & Sludge Treatment Project

## *TPA Milestone Series: M-016 and M-093*

U.S. Department of Energy  
U.S. Environmental Protection Agency  
State of Washington, Department of Ecology

Fourth Quarter FY2012  
October 18, 2012

# Accomplishments – 4<sup>th</sup> Quarter 2012

## **Completed Milestones: M-016-172 – Complete KOP Material Removal from 105KW Fuel Storage Basin Due 9/30/12 Completed 9/10/12**

- The 5th and final KOP MCO was shipped to the Canister Storage Building on September 13, 2012.
- PRC-STP-00722, STP KOP Disposition Subproject Completion of Knockout Pot Processing Report, was released on September 21, 2012 and is available for EPA review.



*Final MCO Shipment*



# Accomplishments – 4<sup>th</sup> Quarter 2012

## Sludge Treatment Project Phase 1- Removal of Containerized Sludge

- **Complete Final Design of Sludge Retrieval & Transfer System (M-016-174, due 9/30/13)**
  - The ECRTS Final Design Report was issued on September 27, 2012.
  - Began preparation for integrated process optimization demonstration testing on mock up sludge retrieval and transfer system and components at the Maintenance and Storage Facility (MASF)
  - RL approval of ECRTS Final Design expected Spring 2013 (CD 2/3)
- **Begin Sludge Removal from 105-KW Fuel Storage Basin (M-016-175, due 9/30/14)**
  - Began civil engineering work associated with annex building underground utility, piping, conduit, footings, foundations and form work.



# Accomplishments – 4th Quarter 2012

## KE Reactor Interim Safe Storage

- Completed 31 of 34 concrete pourbacks to date
- Completed hazardous and combustible material removal from the tool dolly room, and began cleanout of the 3x ballroom. Hazardous material removal from the reactor building interior is 74% complete overall.
- Completed technical evaluation of contractor proposals for construction of the Safe Storage Enclosure and made an award recommendation.

105-KE ISS Pourback



105-KE ISS Tool Dolly Room Cleanout before and after



# Accomplishments – 4<sup>th</sup> Quarter 2012

## 100K Waste Site Remediation

- Obtained RL and EPA approval of Area AG Zone 1 Verification Sampling Instruction.
- Completed Area AG, Zones 1 and 2 Verification Sampling.
- Provided the Remaining Sites Verification Packages (RSVPs) for Area AG, Zone 1 and Zone 2 to RL and EPA for approval (includes waste sites 100-K-3, 100-K-36, 100-K-68, 100-K-69, 100-K-70, 100-K-71, and 100-K-79:Subsite 7).
- Obtained RL and EPA approval of the RSVPs for Area AA Zone 1, Area AA Zone 2, Area AH, 100-K-53, and 100-K-63.
- Completed backfill for Area AA, Area AH and 182K demolition footprint/waste site 100-K-106.
- Completed majority of the backfill for Area AG, Zones 1 and 2.



105KE Reactor Areas AH  
AG Waste Site Backfill –  
Left, June 2012  
Below, September 2012



# Accomplishments – 4<sup>th</sup> Quarter 2012

## 100 K D4 Activities

- Continued 105-KE Interim Safe Storage (ISS) activities.
- Completed demolition of the 183.2KE Sedimentation Basin.
- Completed demolition activities for the 183.7KE Pipe Tunnel.
- Completed demolition, sampling and As-Left-Condition Report for a portion of the 105-KE Water Tunnel.
- Obtained RL concurrence for Removal Action Reports for 183.2KE Sedimentation Basin and 183.7KE Pipe Tunnel and 190KE/KW Main Pump Houses.



105-KE Aerial View



# Milestone Status

TPA Number	Due Date	Description	Status
M-016-172	9/30/12	Complete KOP Material Removal From 105-KW Fuel Storage Basin	Complete
M-016-053	12/31/12	Complete Interim Response Actions for the 100 K Area Within the Perimeter boundary and to the River for Phase 1 Actions	On Schedule
M-016-174	09/30/13	Complete Final Design of Sludge Retrieval and Transfer System	On Schedule
M-093-22	07/31/14	Complete 105KE Reactor Interim Safe Storage in Accordance with Remedial Design/Remedial Action Work Plan	In Renegotiation
M-016-175	09/30/14	Begin Sludge Removal from 105-KW Fuel Storage Basin	At Risk
M-016-173	03/31/15	Select K Basin Sludge Treatment and Packaging Technology and Propose New Interim Sludge Treatment and Packaging Milestones	At Risk
M-016-143	12/31/15	Complete the Interim Response Actions for the 100 K Area Within the Perimeter Boundary and to the River for Phase 2 Actions	In Renegotiation
M-016-176	12/31/15	Complete Sludge Removal from 105-KW Fuel Storage Basin	At Risk
M-016-178	12/31/15	Initiate Deactivation for 105-KW Fuel Storage Basin	At Risk
M-093-26	12/31/15	Initiate 105-KW Reactor Interim Safe Storage	In Renegotiation
M-016-181	09/30/19	Complete Deactivation, Demolition and Removal of 105-KW Fuel Storage Basin	At Risk
M-016-186	12/31/19	Initiate Soil Remediation Under 105-KW Fuel Storage Basin	At Risk
M-093-27	12/31/19	Complete 105-KW Reactor Interim Safe Storage	In Renegotiation
M-016-00C	12/31/20	Complete All Response Actions in the 100 K Area	At Risk



# Project Baseline Performance

Contract to date through September 2012

RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Cost Variance (\$)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)	SPI	CPI
ARRA RL-0041 Capital Asset	179.7	179.7	181.3	0.0	-1.6	179.8	181.3	-1.6	1.00	0.99
Base	110.8	112.9	92.5	2.1	20.4	337.6	322.1	15.5	1.02	1.22
Total	290.5	292.6	273.8	2.1	18.8	517.4	503.5	13.9	1.01	1.07

RL-0012 Spent Nuclear Fuel Stabilization and Disposal	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Cost Variance (\$)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)	SPI	CPI
Base Total	332.0	328.0	329.3	-3.6	-0.9	541.1	531.5	9.6	0.99	1.00

Numbers are rounded to the nearest \$0.1M.



# Planned Activities

Next 6 months

## 105KE Reactor ISS

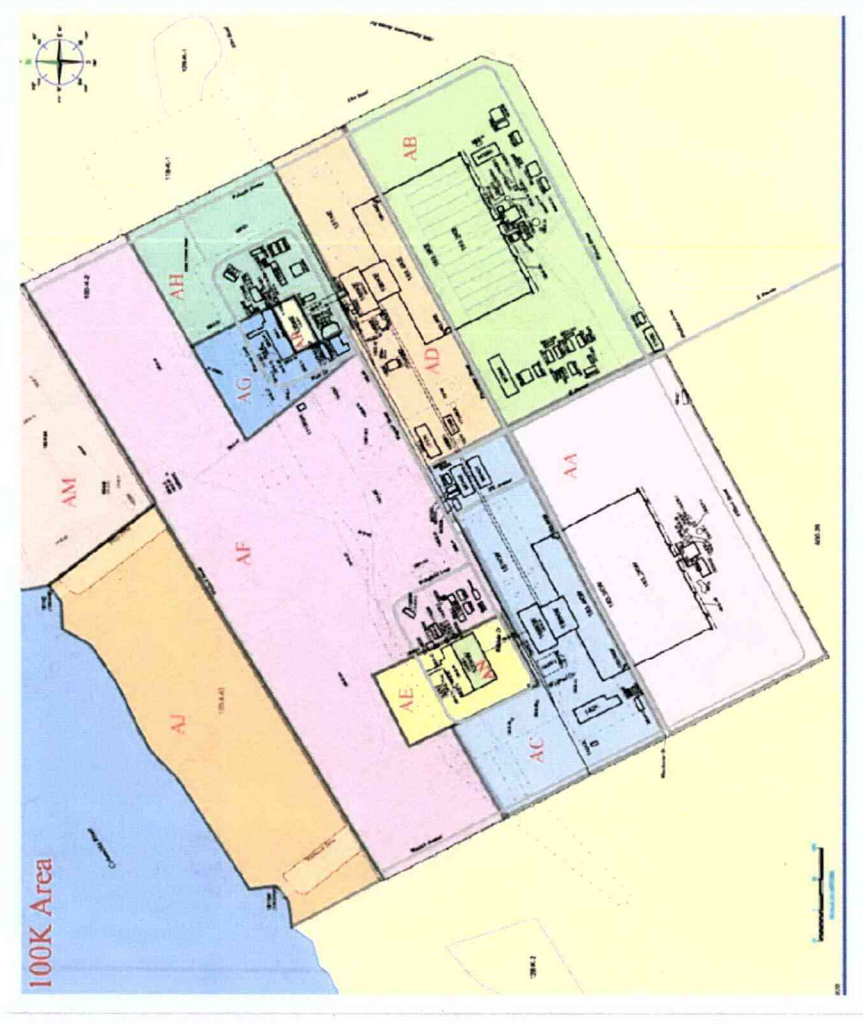
- Implement FHC
- Complete below-grade pourbacks
- Complete clean out of hazardous and combustible materials
- Award contract for safe storage enclosure (SSE) construction
- Begin backfill and compaction for SSE foundation construction



# Planned Activities

Next 6 months

- **D4**
  - Backfill structures as funding permits
- **Waste Site Remediation – Areas AA, AG, AH, AJ**
  - Area AG Zones 1 and 2 – Complete waste site backfill and stabilize/revegetate
  - Areas AA and AH - Revegetate
- **M-016-53 - Complete the Interim Response Actions for 100K Area - Due 12/31/2012 On Schedule**



# Planned Activities

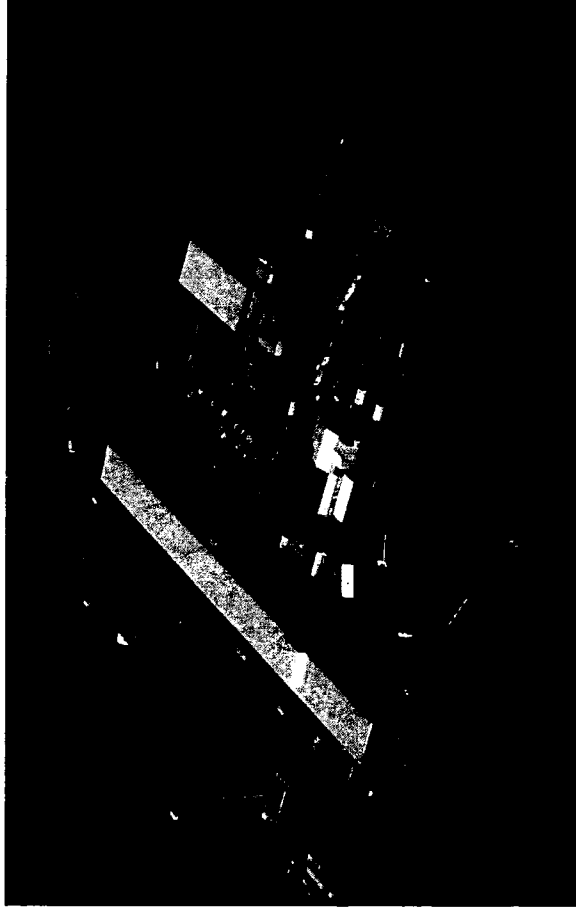
Next 6 months

## Sludge Treatment Project

- **KW Fuel Storage Basin Annex Building and Building Systems**
  - Submit Remedial Design Report to EPA for approval of the design for the KW Fuel Storage Basin Annex Building and building support systems.
  - Complete site excavation and foundation construction of the KW Fuel Storage Basin Annex Building.
- **Engineered Container Retrieval and Transfer System**
  - Complete final design and testing of the ECRTS (*M-016-174, due 9/30/13*).
  - Perform Integrated Process Optimization Demonstration testing.
- **KW Fuel Storage Basin Knock Out Pot Material Removal**
  - Transition the Cold Vacuum Drying Facility to a radiological facility.



# Tri-Party Agreement Quarterly Milestone Review M-91/M-26



October 18, 2012

## Status for the Last Three Months

- M-091-03 Project Management Plan - Annual submission made 06/12/12
- M-091-40 Retrievably Stored Waste (CH) – Target: Retrieve 250 m<sup>3</sup> by 09/30/12 – No waste retrieved
- M-091-41 Retrievably Stored Waste (RH) – Complete non-caisson retrieval by 09/30/16 – No waste retrieved
- M-091-42 MLLW (CH, small container) – Complete treatment by 09/30/17
  - No waste treated
  - 10 m<sup>3</sup> in aboveground storage
- M-091-43 MLLW (RH and large container) – Complete treatment by 09/30/17
  - No waste treated
  - 58 m<sup>3</sup> in aboveground storage

## Status for the Last Three Months

- M-091-44 TRUM Waste (RH and large container) – Certify 300 m<sup>3</sup> by 09/30/18
  - No waste repackaged into a WIPP-certifiable waste form
  - 9,960 m<sup>3</sup> in aboveground storage (includes M-091-46 TRUM waste and TRU waste)
- M-091-46 TRUM waste (CH, small container) – Target: Certify 300 m<sup>3</sup> by 09/30/12 – No waste repackaged into a certifiable waste form
- Non-TPA – DOE-EM 90% TRU Waste Disposition Goal – Hanford Contribution
  - No waste dispositioned
  - Starting – 16,553 m<sup>3</sup>, remaining – 11,146 m<sup>3</sup>



**EM Environmental Management**

safety ✧ performance ✧ cleanup ✧ closure

[www.em.doe.gov](http://www.em.doe.gov)

## Status for the Last Three Months

- M-026-01 Land Disposal Restrictions Report – Comments on Annual Summary Report provided by Ecology

# Fiscal Year 2012 (through June 2012) Performance Measurement

Dollars in Thousands

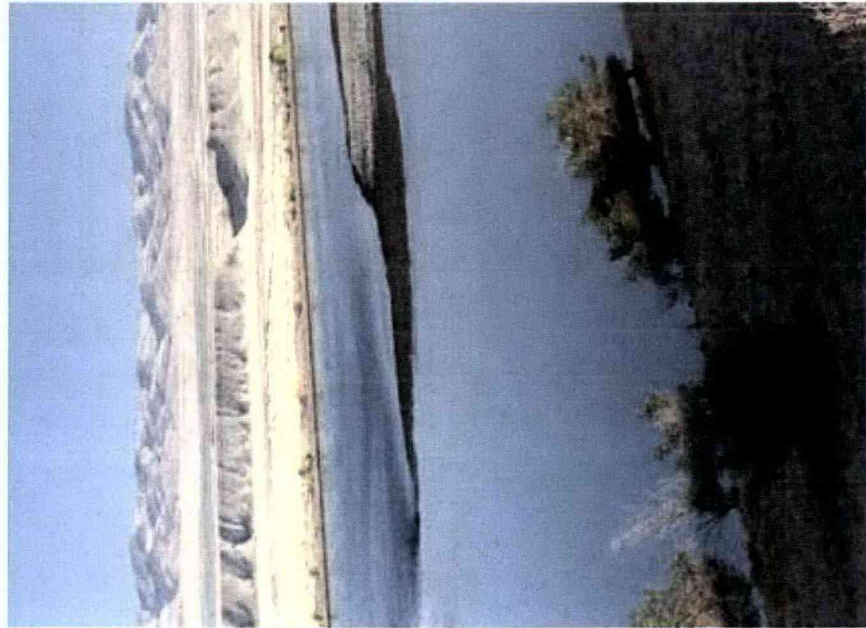
Title	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance	Cost Variance
Central Waste Complex	8,058.7	8,058.7	7,179.9	0.0%	10.9%
Waste Receiving and Packaging Facility (WRAP)	2,074.8	2,074.9	3,473.2	0.0%	-67.4%
T Plant	6,551.9	6,551.9	5,881.5	0.0%	10.2%
MLLW Treatment	50.3	1,400.0	1,250.1	2683.2%	10.7%
TRU Waste Retrieval	283.0	626.9	180.5	121.5%	71.2%
TRU Waste Repackaging	1,770.2	1,868.2	2,758.8	5.5%	-47.7%
TRU Waste Disposition	0.0	0.0	4.8	0.0%	0.0%
Project Management	9,391.7	9,391.7	8,611.7	0.0%	8.3%

## Variance Analysis

- The positive schedule variances for MLLW Treatment and TRU Waste Retrieval are due to work originally scheduled in FY 2011 being performed in FY 2012.
- The negative cost variances for WRAP and TRU Waste Repackaging are due to extra work associated with cleanup of contamination in 2404-WB and lay up activities.
- The positive cost variance for TRU Waste Retrieval is due to work scope requiring less resources than planned.

## Actions Planned for Next Six Months

- Complete WRAP, T Plant, LLBGs lay up work (e.g., move waste to the Central Waste Complex, clean up or stabilize remaining contamination areas, move equipment and supplies to storage, maintain ventilation and fire protection, document facility conditions)
- Support permitting activities



# Central Plateau Remediation Project RL-40 Milestone Review M-016-00, M-085-00

U.S. Department of Energy  
U.S. Environmental Protection Agency  
State of Washington, Department of Ecology

Fourth Quarter FY2012  
October 18, 2012

# Accomplishments – 4<sup>th</sup> Quarter 2012

## Completed TPA Milestones:

- None during 4<sup>th</sup> Quarter 2012

## Complete ARRA Asbestos Abatement Project

- Cut and removed approximately 700 linear feet of steam line within the 200W Area
- Placed signage on remainder of the 200 Area steam lines



Steam line  
prior to  
removal



Cut section of  
steam line  
during  
asbestos  
abatement



**CH2MHILL**  
Plateau Remediation Company

# Milestone Status

TPA Number	Commitment Date	Milestone Title	Status
<b>M-085-00 RL 40 – Complete Response Actions for the Canyon Facilities/Associated Past Practice Waste Sites, other Tier 1 CP Facilities not covered by existing milestones, and Tier 2 CP Facilities</b>			
M-085-01 *	03/30/13	Submit Change Package to establish date for major Milestone M-85-00	On Schedule
M-085-50	12/31/15	Submit Revised RAWP for the 224-B Concentration Facility in accordance with the Action Memo for the Non-Time Critical Removal Action for the 224-B Plutonium Concentration Facility (DOE/RL-2004-36). A change package with a completion milestone will accompany the submittal of the work plan.	On Schedule
M-085-60	03/31/18	Complete EE/CA Report(s) for all Tier 2 Facilities listed in Appendix J	On Schedule
M-085-51	12/31/25	Submit RAWP for the 224T TRUSAF in accordance with the Action Memo for the Non-Time Critical Removal Action for the 224-T Plutonium Concentration Facility (DOE/RL-2004-68). A change package with a completion milestone will accompany the submittal of the work plan.	On Schedule
<b>M-016-00 RL 40 – Complete Remedial Actions for all Non-Tank Farm and Non-Canyon Operable Units</b>			
M-016-200A	9/30/17	Complete U Plant Canyon (221-U) Demolition in accordance w/ RD/RAWP	On Schedule
M-016-200B	9/30/21	Complete U Plant Canyon (221-U) Barrier Construction in accordance w/ the RD/RAWP	On Schedule

\*M-085 Milestone series is included in the Tentative Agreement for renegotiation.



# Project Baseline Performance

Contract to date (through September 2012)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
U Plant/Other	199.4	199.4	193.7	0.0	0.0	5.7	2.9	199.4	193.7	5.7
Outer Zone	84.3	84.3	71.7	0.0	0.0	12.6	15.0	84.3	71.7	12.6
Asbestos Abatement	1.8	1.8	1.5	0.0	0.0	0.3	17.2	1.8	1.5	0.3
ARRA Total	285.5	285.5	266.9	0.0	0.0	18.6	6.5	285.5	266.9	18.6
Base	78.9	78.7	71.3	-0.2	-0.2	7.5	9.5	363.3	355.9	7.4
Total	364.4	364.2	338.2	-0.2	-0.1	26.1	7.2	648.8	622.8	26.0

Numbers are rounded to the nearest \$0.1M.

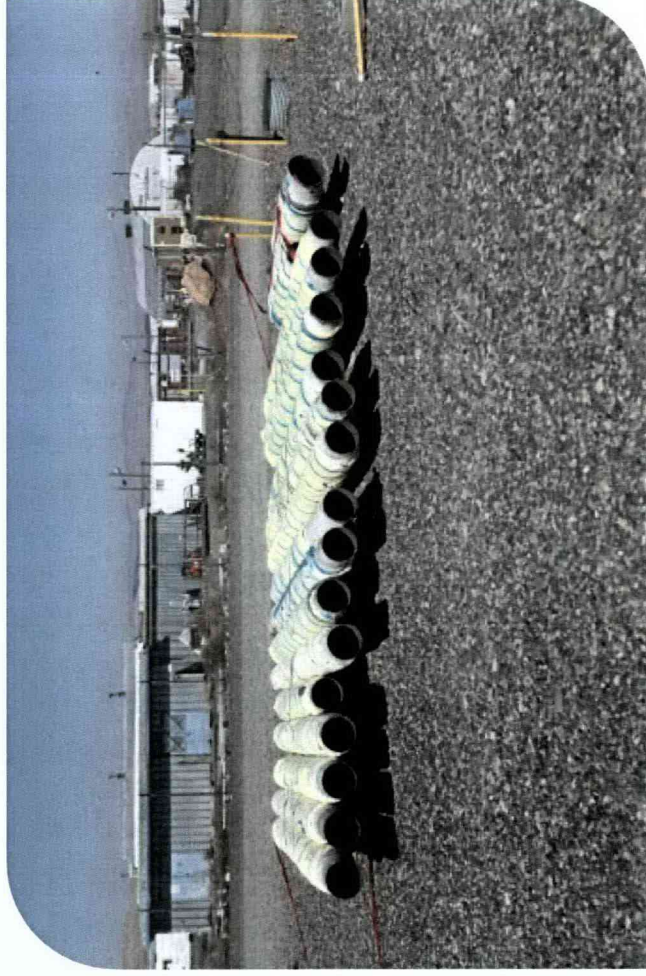


# Planned Activities

Next 6 months

## Asbestos Abatement

- Monitoring and management of lines to protect environment and workers

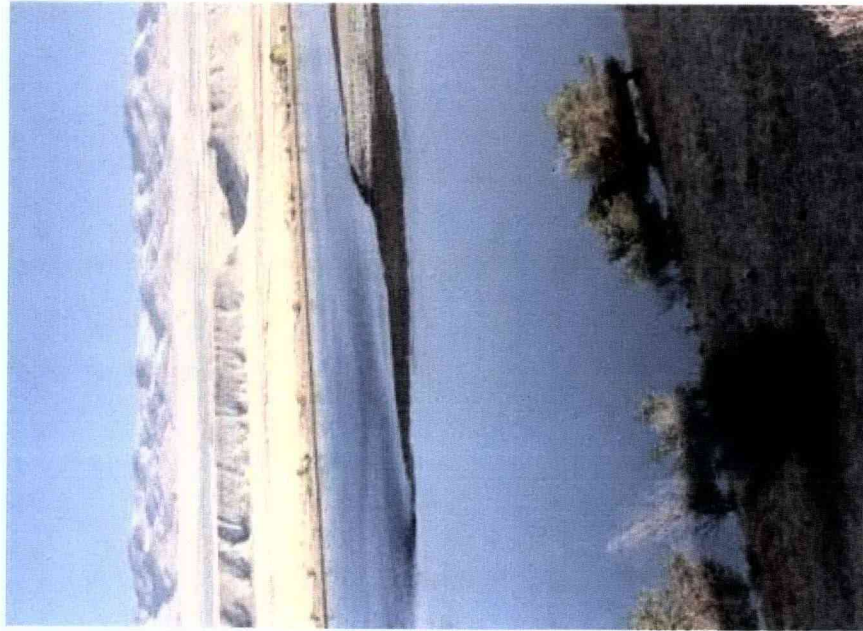


Staged cut and wrapped asbestos pipe awaiting offsite shipment

Remainder of Central Plateau work is in a Minimum Safe Configuration



**CH2MHILL**  
Plateau Remediation Company



# PFP Closure Project

TPA Milestone: M-083

Larry Romine, Federal Project Director  
Rick Bond, Ecology Project Manager



4th Quarter 2012  
Oct 18, 2012

# Quarterly Milestone Summary

(July – September 2012)

TPA Milestone	Due Date	Status	Milestone Description
M-083-24	06/30/12	Complete	Submit a Surveillance and Maintenance (S&M) Plan as a primary document to Ecology
M-083-24-101	09/30/16	On Schedule	Submit Rv. 0 of the PFP Complex S&M Plan to Ecology
M-083-44	09/30/15	In Jeopardy	Complete transition of 234-5Z & -ZA, 243-Z, 291-Z and 291-Z-1 buildings to support PFP decommissioning deactivate and prepare for dismantlement of the above grade portions of these facilities
M-083-00A	09/30/16	On Schedule	Complete PFP Facility Transition & Selected Disposition Activities

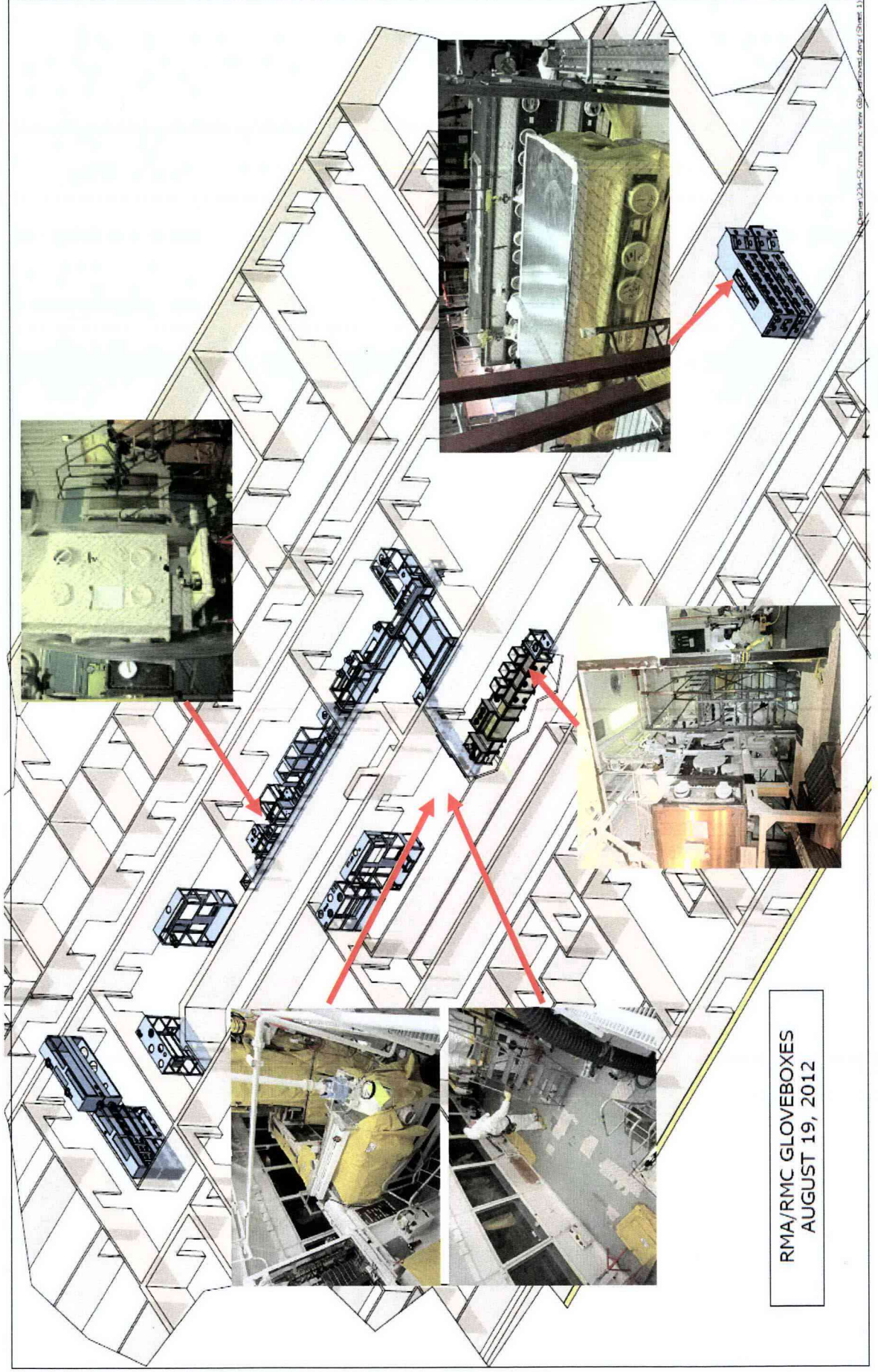
# Accomplishments – 4<sup>th</sup> Quarter

- Completed removal of 180 of 238 Gloveboxes (76%)
- Continued RMA/RMC Glovebox deactivation activities; five gloveboxes removed in last 3 months
- Completed size reduction of five more pencil tank units for a total of 95 thru 09/30/12. 101 remaining. Completed the PRF Canyon Crane repairs.

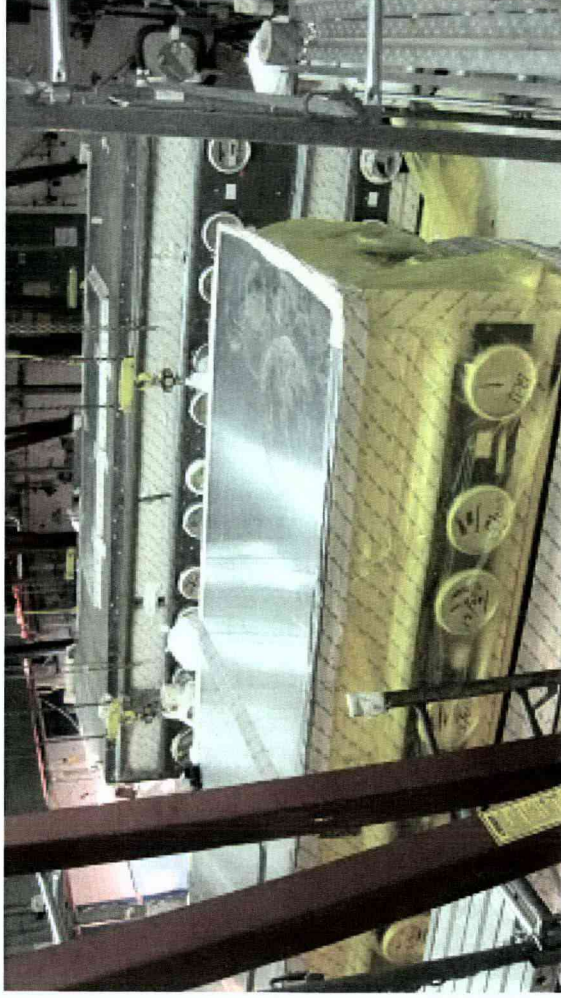
Room 235A-3 – Separating Glovebox HA-9C from HA-10



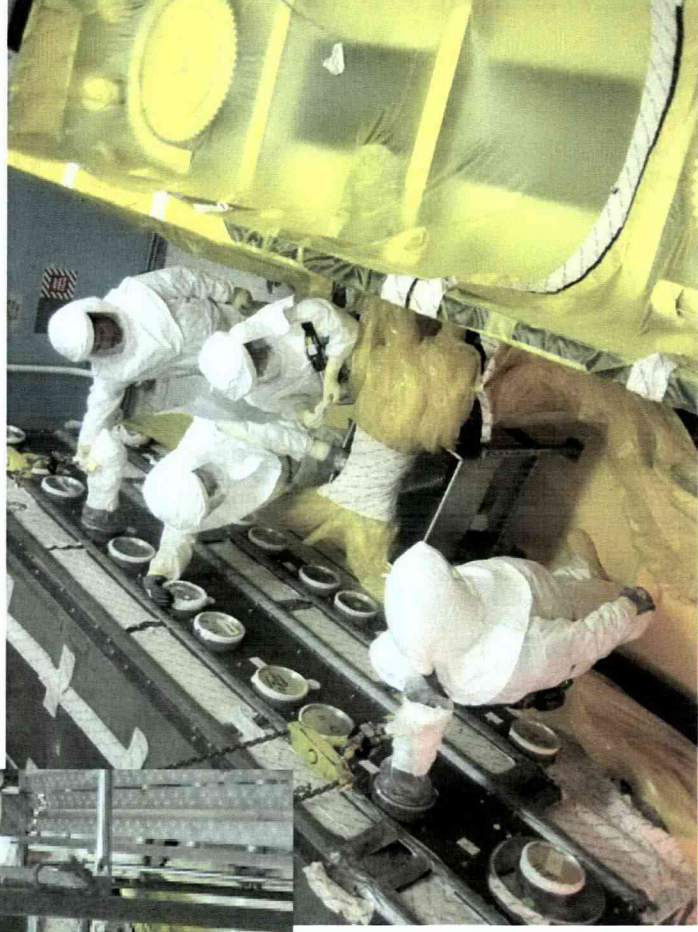
# Accomplishments – 4<sup>th</sup> Quarter cont'd:



# Accomplishments – 4<sup>th</sup> Quarter

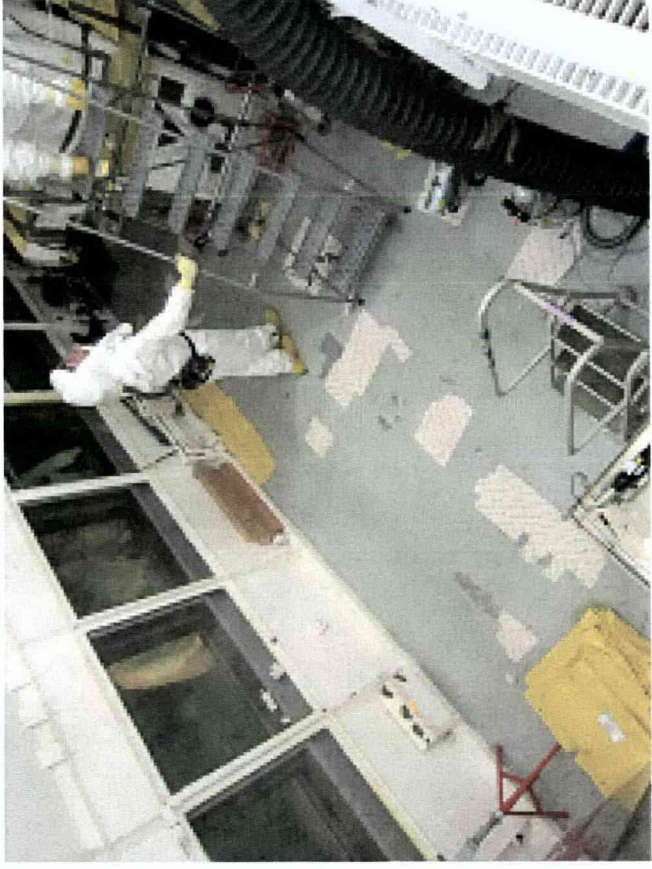
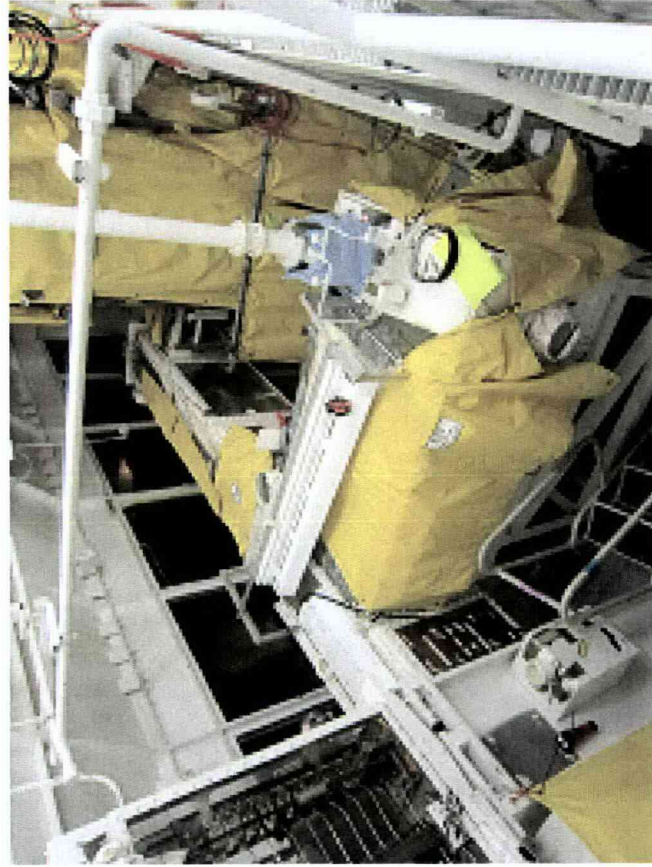


Room 235B: HA-23S Separation of  
Upper Section from Lower Section



# Accomplishments – 4<sup>th</sup> Quarter Cont'd:

Room 235A-3 : Before & After Photos after GBs HA-8A, -8B, -9C, -9D, & 9E were removed



# Accomplishments – 4<sup>th</sup> Quarter Cont'd:

- Continued disposition of Process Vacuum System Piping (28%; 1,825 of 6,436 ft.) & Process Transfer Lines (61%; 709 of 1,154 ft.)
- Continued NDA on tunnel drain lines & Asbestos Insulation Removal (71%; 16,971 of 24,000).

Prepping Transfer Line Room 262



Asbestos Removal Room 262



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# Accomplishments – 4<sup>th</sup> Quarter Cont'd:

- Performed required min-safe inspections, surveillances and maintenance activities
- 291-Z Ventilation Exhaust Fans
  - Completed EF-5 weld repairs.
  - Replaced the motor on EF-7
  - Replaced and torqued bearing bolts on EF-2, 4, 6, & 7.
  - Installed new belt and sheave on EF-6
  - Continued weekly fan vibration and thermal monitoring
  - Completed vibration testing of ET-8 & 9.



# Project Baseline Performance

Contract to-Date (through September 2012)

RL-0011 Nuclear Material Stabilization and Disposal	Budgeted		Budgeted		Actual		Schedule		Cost		Cost		Budget at		Estimate at	
	Cost	of Work	Scheduled	Performed	Cost	of Work	Variance	Variance	Variance	(\$)	Variance	(%)	Completion	(BAC)	Completion	(EAC)
							(\$)	(%)								(VAC)
<b>Total</b>	\$534,710	\$526,330	\$539,058	(\$8,380)	-1.5%	(\$12,728)	-2.4%	\$894,350	\$915,978	(\$21,628)						
<b>ARRA</b>	\$287,892	\$287,892	\$297,624	0	0%	(\$9,733)	-3.3%	\$287,892	\$297,624	(\$9,733)						
<b>Base</b>	\$246,619	\$238,439	\$241,434	(\$8,380)	-3.3%	(\$2,995)	-1.2%	\$606,459	\$614,077	(\$7,618)						

Numbers are rounded to the nearest \$K.



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# Issues/Challenges

## Non-Regulatory Issues:

- Remaining gloveboxes are significantly more difficult to remove than planned.
- Equipment failures associated with aging building systems/components (e.g. PRF crane, exhaust fans) impacting D&D
- Utilization of current resources/staff productivity
- Work package development to ensure timeliness, quality & backlog
- Staff retention; layoffs/bump and roll
- FY-13/14 Budgets to sustain PMB
- Continue efforts to identify alternate approaches to achieve efficiencies and cost & schedule savings (achieve VE goals)
- Open Air Demo vs. Containment Structure

# Planned Activities

Next 3 months

## Disposition Solid Waste

- Implementation of loading SLB2s inside 234-5Z
- Implementation of new CE-SPA Shipment Evaluation Checklist for TRU debris / ductwork / piping in SLB2s
- Implement TRU glovebox shipments to SWOC for storage and management as part of VE Breakthrough Initiative 3
- Disposition of PFP sources that are no longer required to support D&D

## 234-5Z RMA/RMC Lines

- Complete the removal of HA-23S
- Complete Room 235B bulk area cleanout activities
- Complete the internal equipment removal of all Room 235A-2 gloveboxes
- Complete the removal of the remaining external equipment for all 235A-2 gloveboxes
- Complete removal of HC-12S, HC-13MD, HC-1C, and HC-1D
- Continue asbestos abatement and process vacuum line removal

# Planned Activities

Next 3 months Cont'd:

## 236-Z Plutonium Reclamation Facility

Pencil Tank Size Reduction: Complete size reduction of Pencil Tank Assemblies 38 and 37.

Gallery Gloveboxes: Continue equipment removal from east gallery gloveboxes.

MT Gloveboxes: Complete field work for the MT conveyor mechanical isolation.



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# Soil and Groundwater Remediation Project Milestone Review

M-015-00, M-016-00, M-024-00, M-037-00

U.S. Department of Energy  
U.S. Environmental Protection Agency  
State of Washington, Department of Ecology

Fourth Quarter FY2012  
October 18, 2012

# Accomplishments – 4<sup>th</sup> Quarter 2012

## ➤ **Completed TPA Target M-024-63-T01**

*Conclude Discussions of Well Commitments Initiated Under M-024-58, due August 1, 2012*  
Completed July 25, 2012

## ➤ **Completed TPA Milestone M-016-120**

*GW Treatment System for Tc-99 Plume at S/SX Tank Farm in 200-UP-1, due August 31, 2012*  
Completed August 13, 2012

## ➤ **Completed 200-UP-1 Record of Decision for Interim Action**

Signed September 27, 2012



# Accomplishments – 4<sup>th</sup> Quarter 2012

## 200 West Area Groundwater Treatment Facility

- Analytical testing has shown that the plant is successfully reducing the concentration of contaminants to below cleanup levels specified in the Record of Decision.

## 200-DV-1

- The B Area perched water removal system was shut down on September 19, 2012, and the system was placed into lay-up. At the time of shut down, the system had removed a total of 65,507 gallons of effluent from the perched zone. Contractor has been authorized to restart the perched water removal system.

## Pump and Treat Operations

- Treated 320 million gallons of groundwater
- Removed 4,251 kg of contaminants from the groundwater

## Sampling

- 3,081 samples collected
- 6,252 analyses reported

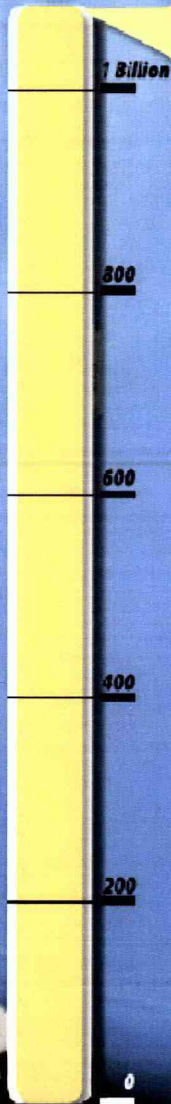


# FY2012 Progress

## Soil and Groundwater Treatment Progress FY2012

Treat a total of **ONE BILLION** gallons of groundwater in FY 2012

**Fourth Quarter FY 2012**  
1.2 billion gallons of groundwater treated



**Contract to Date**  
3.2 billion gallons of groundwater treated  
4,090 kg of contaminants removed from treated groundwater

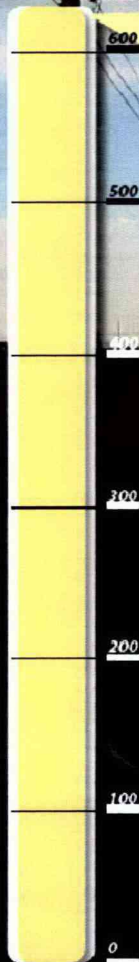


# FY2012 Progress

## Soil and Groundwater Treatment Progress FY2012

Remove a total of 600 kg of Hexavalent Chromium in FY 2012

Fourth Quarter FY 2012  
672 kg of Cr6 removed from the groundwater



Contract to Date  
3.2 billion gallons of groundwater treated  
4,090 kg of contaminants removed from treated groundwater



# FY2012 Progress

## Soil and Groundwater Treatment Progress FY2012

Remove a total of 400 kg of  
Carbon Tetrachloride in FY 2012



**Contract to Date**  
3.2 billion gallons of groundwater  
treated  
4,090 kg of contaminants removed  
from treated groundwater

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# Milestone Summary

TPA Number	Milestone or Target Date	Milestone/Target Title	Status
<b>M-015-00</b>	<b>Complete RI/FS (or RFI/CMS &amp; RI/FS) Process for All Non-Tank Farm Operable Units Except for Canyon/Associated Past Practice Waste Site Operable Units Covered in M-85-00</b>		
M-015-70-T01	11/24/11	(Project Forecast Date: 12/14/2012) Submit FS Report and PP for 100-HR-1/2/3 and 100-DR-1/2 OUs	Missed
M-015-68-T01	11/30/11	(Renegotiating to 11/30/16) Submit RI/FS Report and PP for 100-BC-1/2/5 OUs for GW and Soil	Missed
M-015-64-T01	12/17/11	(Project Forecast Date: 12/28/2012) Submit RI/FS Report and PP for 100-FR-1/2/3 and 100-IU-2/6	Missed
M-015-62-T01	09/17/12	(Renegotiating to 6/30/13) Submit FS/PP for 100-NR-1/2 OUs Including GW and Soil	Missed
M-015-00D	12/31/12	(Renegotiating to exclude BC and N) Submit PP for all 100 & 300 Area OUs to Complete RI/FS Process	At Risk *
<b>M-016-00</b>	<b>Complete Remedial Actions for all Non-Tank Farm and Non-Canyon Operable Units</b>		
M-016-120	08/31/12	(Completed 8/13/2012) Groundwater Treatment System for the Tc-99 plume at the S/SX Tank Farm	COMPLETE
M-016-110-T01	12/31/12	Take Actions to Contain or Remediate Hexavalent Cr 100A GW Plumes	On Schedule

\*Activities to meet target dates for M-015-70-T01, M-015-68-T01, M015-64-T01, and M-015-62-T01 are behind schedule; however, project is on schedule to meet the revised M-015-00D, which is under negotiation.



# Milestone Summary

TPA Number	Milestone or Target Date	Milestone/Target Title	Status
<b>M-024-00 – Complete Well Installations with RCRA/CERCLA Requirements</b>			
M-024-63-T01	08/01/12	(Completed 7/25/12) Conclude Discussions of Well Commitments	COMPLETE
M-024-63	12/31/12	(Completed 3/28/11) DOE Shall Complete Construction of all Wells Listed	COMPLETE
<b>M-037 – RCRA Closures</b>			
M-037-03	04/30/2013	Submit Revised Closure Plans to support TSD closure for two (2) TSD Units: 216-B-3 Main Pond system, and 216-S-10 Pond and Ditch.	On Schedule*

\*Ecology to revise draft closure plans.



# Project Baseline Performance

Contract to date through September 2012

WBS 030/ RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Base RL-0030.C1 GW Remedy Implement	73.4	73.3	84.7	-0.1	-0.2	-11.5	-15.6	73.4	84.7	-11.3
ARRA RL-0030.R1.1 Cleanup Operations	175.0	175.0	174.6	0.0	0.0	0.4	0.2	175.0	174.6	0.4
ARRA RL-0030.R1.2 Well Drilling Operations	40.7	40.7	38.4	0.0	0.0	2.4	5.8	40.7	38.4	2.4
<b>SUBTOTAL</b> RL-0030.C	<b>289.1</b>	<b>289.0</b>	<b>297.7</b>	<b>-0.1</b>	<b>0.0</b>	<b>-8.7</b>	<b>-3.0</b>	<b>289.1</b>	<b>297.7</b>	<b>-8.6</b>
Base RL-0030.O1 RL 30 (Operations)	455.8	467.9	463.4	2.0	0.4	4.5	1.0	1,158.8	1,150.7	8.1
ARRA RL-0030.R1.3 Support Operations	51.4	51.4	51.1	0.0	0.0	0.3	0.5	51.4	51.1	0.3
<b>TOTAL</b>	<b>806.4</b>	<b>808.3</b>	<b>812.2</b>	<b>1.9</b>	<b>0.2</b>	<b>-4.0</b>	<b>-0.5</b>	<b>1,499.4</b>	<b>1,499.6</b>	<b>-0.2</b>
Numbers are rounded to the nearest \$0.1M.										



# Planned Activities

Next 6 months

## 200-ZP-1 / 200-PW-1 Soil Vapor Extraction

- Complete Operation Test Procedure for 200 West P&T system.
- Initiate 24-hour unmanned operation.
- Complete drilling and sampling of 4 new extraction/injection wells for 200 West P&T.
- Begin installing in-line Tc-99 monitor between ion exchange columns.
- Prepare Draft Annual Report for CY12 200-PW-1 SVE operations.

## 200-UP-1

- Continue S/SX groundwater extraction system operations.
- Initiate preparation of the RD/RAWP.

## 200-BP-5

- Restart and continue perched water extraction system operations.
- Decommission well #299-E33-18.



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# Planned Activities

Next 6 months

## 300 Area

- Issue Rev 0 RI/FS Report and Proposed Plan and initiate public review.

## 100 K Area

- Continue progress toward issuance of Rev. 0 RI/FS Report and Proposed Plan.

## 100 F/IU Area

- Issue Draft A RI/FS Report and Proposed Plan to EPA for review.

## 100 D/H Area

- Issue Draft A RI/FS Report and Proposed Plan to Ecology for review.

## 100 N Area

- Continue progress toward delivery of Draft A RI/FS Report and Proposed Plan to Ecology for review in June 2013 (negotiated date).

## 100 BC Area

- The selected remedy decision will be postponed until 2016. Additional field investigations will be planned and mobilization activities initiated.



**Hanford Federal Facility Agreement and Consent Order  
IAMIT Milestone Review Form  
(For Milestones without Issues or Significant Activity)**

**M-036-01 Hanford Lifecycle Report**

**Date: October 4, 2012**

**1. Significant Activities Last Three Months**

- Continued work on the scope, schedule and cost requirements for producing the 2013 Lifecycle Report, including development of the alternatives analysis.
- Input from the public and regulatory agencies was included in the Draft 2013 Lifecycle Report.
- The Draft 2013 Lifecycle Report was delivered to DOE on August 24, 2012 for review and further development.

**2. Budget Status (within budget or explain variance)**

No major issues identified.

**3. Issues**

No major issues identified.

**4. Non-TPA Regulatory Issues with Potential Impact to TPA Milestone**


No major issues identified.

**5. Significant Activities Planned Next Three Months**

- Complete work on production of the 2013 Lifecycle Report. Submit the 2013 Lifecycle Report to EPA and Ecology by January 31, 2013.
- Identify and develop the alternatives analysis to be included in the 2014 Lifecycle Report through meetings of the Tri-Party Agencies.

**Note:** Approved form to be submitted to IAMIT members 7 days prior to scheduled Milestone Review.

  
\_\_\_\_\_  
**DOE Project Manager**

  
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**Ecology Project Manager**

  
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**EPA Project Manager**